WHAT IS CLAIMED IS:

1. A transmitter unit for transmitting data via a data link, said transmitter unit comprising a header compression unit adapted for converting a primary header of a data packet to be transmitted into a corresponding secondary header, with said primary header being related to said secondary header in one-to-one correspondence; and wherein said transmitter unit is adapted for transmitting a modified data packet via said data link, said modified data packet comprising said corresponding secondary header.

2. The transmitter unit of claim 1, wherein said data packet is an ATM cell, and wherein said primary header is an ATM header.

3. The transmitter unit of claim 1, wherein said data link is part of an access network, in particular of an xDSL network.

4. The transmitter unit of claim 1, wherein said modified data packet is a fixed packet size.

5. The transmitter unit of claim 1, wherein the size of said secondary header is substantially smaller than the size of said primary header.

6. The transmitter unit of claim 1, wherein said header compression unit is adapted for converting said primary header in real-time.

7. The transmitter unit of claim 1, wherein said header compression unit is adapted for removing redundancy check bits that are part of said primary header.

8. The transmitter unit of claim 1, wherein said header compression unit is adapted for copying a predefined part of the bit sequence for said primary headers to said corresponding secondary header without any modification.

9. The transmitter unit of claim 1, wherein said header compression unit is adapted for assigning, whenever a previously unknown primary header is encountered for the first time, a secondary header to said primary header.

10. The transmitter unit of claim 1, wherein said header compression unit comprises at least one lookup table, with said lookup table being accessed for converting said primary header, or a part thereof, into said corresponding secondary header, or a part thereof.

11. The transmitter unit of claim 10, wherein said header compression unit is adapted for creating, whenever said secondary header is assigned to a previously unknown primary header, a corresponding entry in said lookup table.

12. The transmitter unit of claim 10, wherein an entry of said lookup table comprises header information for relating said primary header, or a part thereof, to said corresponding secondary header, or a part thereof.

13. The transmitter unit of claim 10, wherein an entry of said lookup table comprises said primary header, or a part thereof, whereby said corresponding secondary header, or a part thereof, is represented by the respective entry number.

14. The transmitter unit of claim 10, wherein said header compression unit is adapted for searching said lookup table for an entry that matches with said primary header of said data packet to be transmitted, or with a part thereof, and for fetching, in case of a match, said corresponding secondary header, or a part thereof.

15. The transmitter unit of claim 1, wherein said transmitter unit is adapted for transmitting update information packets via said data link, with said update information packets comprising update information for updating at least one lookup table on the part of a receiver unit.

16. The transmitter unit of claim 15, wherein each time a new entry in said at least one lookup table is created, an update information packet comprising header information of said entry is transmitted.

17. The transmitter unit of claim 15, wherein said update information comprises one or more secondary headers, or parts thereof, and for each of said secondary headers, a corresponding primary header said secondary header has been assigned to, or parts thereof.

18. The transmitter unit of claim 1, wherein said secondary header comprises extra bits that are used for transmitting control information.

19. The transmitter unit of claim 1, wherein said secondary header comprises extra bits for accommodating count values required for transmitting said modified data packet in an inverse multiplexing mode.

20. A receiver unit for receiving data transmitted via a data link, said receiver unit comprising a header decompression unit adapted for converting a secondary header of a modified data packet received via said data link into a corresponding primary header, with said secondary header being related to said primary header in one-to-one correspondence.

21. The receiver unit of claim 20, wherein said modified data packet is a fixed packet size.

22. The receiver unit of claim 21, wherein said receiver unit is adapted for performing a cell delineation by counting the bytes received by said receiver unit.

23. The receiver unit of claim 20, wherein said receiver unit is adapted for performing a cell delineation by counting the bytes received by said receiver unit.

24. A method for transmitting data via a data link, said method comprising the steps of:

converting a primary header of a data packet that is to be transmitted via the data link into a corresponding secondary header, with said primary header being related to said secondary header in one-to-one correspondence; and

transmitting a modified data packet via the data link, said modified data packet comprising said corresponding secondary header .

25. The method of claim 24, further comprising the step of removing redundancy check bits that are part of said primary header.

26. The method of claim 24, further comprising the step of copying a predefined part of the bit sequence for said primary header to said corresponding secondary header without any modification.

27. A method for receiving data transmitted via a data link, said method comprising the step of:

converting a secondary header of a modified data packet that has been received via said data link into a corresponding primary header, with said secondary header being related to said primary header in one-to-one correspondence.

28. A method of data transport over an access network, comprising the steps of:

receiving a data packet having a header;

reducing said header in said data packet to create a modified data packet; and

transmitting said modified data packet over the access network .

29. A program stored on a data carrier, capable of executing the method of claim 24.

30. A computer comprising the program of claim 29.